

measuring tools configured to determine the outside diameter of the melt column;
whereby the extruded melt column is moved from the extruder into the vacuum chamber, the outer surface of the melt column is exposed to the vacuum in the vacuum chamber, and a change in the vacuum changes the outside diameter of the melt column in a controlled manner based on the measured outside diameter of the melt column determined by the measuring tools.

7. (New) The device of claim 6, wherein the measuring instruments operate with sensing tools resting on the outer surface of the melt column.

8. (New) The device of claim 6, wherein the measuring instruments determine the outside diameter of the melt column without physically touching the melt column.

9. (New) The device of claim 8, wherein the measuring instruments determine the outside diameter using sound or light sensors.

10. (New) The device of claim 6, further comprising a calibrating station, the calibrating station being adjacent to the vacuum chamber and configured to calibrate the outer diameter of the pipe-shaped melt column to a predetermined diameter.

11. (New) The device of claim 10, further comprising a vacuum calibrating bath, the vacuum calibrating bath being adjacent to the calibrating station and configured to bath the calibrated melt column to cool and harden the calibrated melt column.

12. (New) The device of claim 6, further comprising an adjustable vacuum seal, the vacuum seal configured to engage the outer surface of the melt column to maintain the vacuum in the vacuum chamber, and the vacuum seal adjusts automatically to the outside diameter of the pipe.